UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addless: COMMISSIONER FOR PATENTS P.O. Boy 11450 Alexandra, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,686	04/02/2004	Masae Sasano	50335-051	9775
7590 05/14/2007 McDERMOTT, WILL & EMERY 600 13th Street, N. W.			EXAMINER	
			ALHIJA, SAIF A	
Washington, DC 20005-3096			ART UNIT	PAPER NUMBER
			2128	
	•			
			MAIL DATE .	DELIVERY MODE
		•	05/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/815,686	SASANO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Saif A. Alhija	2128				
The MAILING DATE of this communication app						
Period for Reply	(10.057.70.5VDID5MONTH)	O) OD TUUDTY (00) DAYO				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 07 M	arch 2007.					
,	, — · · · · · · · · · · · · · · · · · ·					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	:х рапе Quayle, 1935 С.D. 11, 48	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 6-10 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 6-10 is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	r election requirement					
are subject to restriction affairs	r diodion requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine						
10)⊠ The drawing(s) filed on <u>02 April 2004</u> is/are: a)						
Applicant may not request that any objection to the	-					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119	•					
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).				
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Sta ğ e				
application from the International Bureau	u (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)	·					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Di 5) Notice of Informal F 6) Other:					

Art Unit: 2128

<u>DETAILED ACTION</u>

1. Claims 6-10 have been presented for examination.

Claims 1-5 have been cancelled.

Response to Arguments

- 2. Applicant's arguments filed 7 March 2007 have been fully considered but they are not persuasive.
- i) Following Applicants cancellation of claims 1-5 the claim objections for claims 1-5 are withdrawn, however newly presented claim 10 is objected below.
 - ii) Following Applicants amendment to the specification the objection is withdrawn.
- Applicant is respectfully requested to indicate amended limitations in the newly presented claims. The Examiner also notes that Applicant is arguing the 101 and 112 2nd rejections of claims 1-5, which have been cancelled. Applicant is requested to direct arguments to the claims as presented. With respect to the product by process argument presented by Applicant see the 101 and 112 rejections presented below.
 - iv) Applicant argues:

First, the Examiner assert that the phrase "inherit character" is vague and indefinite.

Applicants respectfully submit that the concept of inheritance is well known in the computer programming arts and that in light of the specification, one of ordinary skill in the art would clearly understand what is meant by the phrase "inherit character."

The Examiner agrees that the concept of inheritance is well known in the computer programming arts, however the phrase "inherit character" is inappropriate. If one were to define the term inherit in the phrase to mean inheritance from the computer programming arts then the term character must also be interpreted in the computer programming arts. A character is defined to be a letter, number, punctuation mark, or other symbol represented by a single byte. Therefore Applicants definition of "inherit character" differs from the broadest reasonable interpretation of the phrase and therefore renders the claims vague and indefinite. The 112 2nd rejection is maintained.

v) Applicant further argues:

Art Unit: 2128

Second, the Examiner alleges that the phrase "phenomenological model" renders the claims vague and indefinite. Applicants respectfully submit that this phrase is clearly related to the remaining claim elements because claim 1 recites classifying models which represent phenomena, and the phenomenological model is used to create a model of the classes based on the observed phenomena.

Page 3

With respect to the term phenomenological, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "phenomenological" in claims 5-10 is used by the claim to mean "a model of classes based on observed phenomena", while the accepted meaning, according to Merriam-Webster Dictionary, is:

phenomenology

Main Entry: phe·nom·e·nol·o·gy ◆

Pronunciation: \fi-,n\ara-m\ara-\n\ara-l\ara-j\arepsilon\

Function: noun

Inflected Form(s): plural -gies

Etymology: German Phänomenologie, from Phänomenon phenomenon + -logie -logy

Date: circa 1797

1: the study of the development of human consciousness and self-awareness as a preface to or a part of philosophy

2 a (1): a philosophical movement that describes the formal structure of the objects of awareness and of awareness itself in abstraction from any claims concerning existence (2): the typological classification of a class of phenomenology of religion> b: an analysis produced by phenomenological investigation phenomenological investigation phenomenological investigation phenomenological investigation

Therefore the term is indefinite because the specification does not clearly redefine the term. The specification recites phenomenological only in the context of reiterating the claimed limitation. The 112 2nd rejection is maintained.

vi) Applicant further argues:

Art Unit: 2128

The Examiner also considers the phrase "defining an abstract class by extracting characteristics common to a plurality of similar parts ... if such parts exists" as rendering the claims vague and indefinite. Specifically, the Examiner asserts that it is unclear what types of characteristics are extracted from the components and what is extracted if the parts do not exist. Applicants respectfully submit that the claim clearly recites that characteristics common to a plurality of similar parts are extracted. There is no need to list specific characteristics in this claim. Furthermore, it is clear that nothing is extracted if the abstract class is not defined. The Examiners' attention is directed to paragraph [0021] of the specification as published, which clearly supports this feature.

Following Applicants arguments the Examiner notes that any and all characteristics, the broadest reasonable interpretation, can be utilized to anticipate the claimed limitation and the 112 2nd rejection is withdrawn.

vii) Applicant further argues:

Next, the Examiner asserts that the phrase "necessary types of part" renders the claims vague and indefinite because it is unclear what constitutes a necessary part. Claims 6 – 12 have been drafted to recite "necessary types of parts to be distinguished" in order to more distinctly express the subject matter of the invention.

The Examiner notes Applicants amendment to the claims to recite "necessary types of parts to be distinguished" from the previous limitation "necessary types of parts." Applicants amendment results in a change in scope and in view of the change in scope the 112 2nd rejection is withdrawn.

viii) Applicant further argues:

The Examiner also asserts that the phrase "creating a simulation program" renders the claims vague and indefinite because it is unclear how the simulation program is created. Clearly, this phrase simply refers to the process of assembling the program based on the defined classes.

Following Applicants arguments the Examiner notes that any resultant computer simulation program utilizing the previous limitations is anticipated and the 112 2nd rejection is withdrawn.

Art Unit: 2128

ix) The Examiner notes that Applicants have not addressed the 112 2nd rejections in Section 7.vi and 7.vii in the previous office action and reiterated below.

Page 5

- Applicants state that the Judge and Karanikas reference do not disclose configuring the simulation program. First with respect to the Judge reference it is unclear how the simulation program can be run without first being configured. Further the reference states that elements of the configuration, the heat exchanger, can also be configured; see page 249, left column, second paragraph. Second, Karanikas discloses configuration of the simulation in, for example, paragraphs 86, 918, 1040, in addition to the citations provided previously. Applicant, on page 9, has merely summarized the Judge and Karanikas references into one or two sentences and stated that they do not teach Applicants claimed limitations. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Further, Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.
- Applicant has requested the Examiner, in the event of maintaining the prior art rejections to present a new non-final in order to allow for Applicants to respond. First, the Examiner notes that the claims have been amended in the case of the preamble as well as a further limitation, see section vii above. Second the Examiner has cited particular columns and line numbers in the references applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.
- xii) The Examiner respectfully requests, in the event the Applicants choose to amend or add new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution.

Application/Control Number: 10/815,686 Page 6

Art Unit: 2128

xiii) Further, the Examiner respectfully encourages Applicants to direct the specificity of their response with regards to this office action to the broadest reasonable interpretation of the claims as presented. This will avoid issues that would delay prosecution such as limitations not explicitly presented in the claims, intended use statements that carry no patentable weight, mere allegations of patentability, and novelty that is not clearly expressed.

PRIORITY

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 27 July 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the Examiner has considered the IDS as to the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

MPEP 2106 recites:

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result" State Street 149 F.3d at 1373, 47 USPQ2d at 1601-02. A process that consists solely of the manipulation of an abstract idea is not concrete or tangibles. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed.Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

- 5. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
- i) Claim 10, in view of Applicants arguments on page 7, represents a product by process claim.

 Therefore, according to MPEP 2173.05(p), the claims are rejected since they overlap statutory categories.

Art Unit: 2128

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. *> IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005);<
Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) *>(< claim directed to an automatic transmission workstand and the method * of using it * held ** ambiguous and properly rejected under 35 U.S.C. 112, second paragraph>)<.

Such claims *>may< also be rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. Id. at 1551.

Appropriate correction is required.

All claims dependent upon a rejected base claim are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- i) Claims 6-10 contain the phrase "inherit character." It is unclear what is meant by this phrase and as such the claim is rendered vague and indefinite. See section 2.iv above.
- claims 6-10 contain the phrase "phenomenological model." The term phenomenological is defined as "relating to experiences; phenomenological research emphasizes the importance of how people experience and feel things." It is unclear how this phrase conforms to the rest of the claim and as such the claims are rendered vague and indefinite. See section 2.v above.
- to U.S. practice, as "means for" claims are separate from method claims.
- iv) The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Art Unit: 2128

v) Claim 10 represents a product by process claim and therefore is indefinite and rejected under MPEP 2173.05(p). See 101 rejection above.

All claims dependent upon a rejected base claim are rejected by virtue of their dependency.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claim 6-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Judge et al. "A Heat Exchanger Model for Mixtures and Pure Refrigerant Cycle Simulations" hereafter referred to as Judge.
- 8. Claim 6-10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Karanikas et al., U.S. Patent Application 2003/0201098, "In situ recovery from a hydrocarbon containing formation using one or more simulations, hereafter referred to as Karanikas.

Regarding Claim 6:

The reference discloses A computer-implemented method for using a computer system to configure a simulation program executable by a computer processor for computing amounts of heat exchanged, comprising the steps of:

classifying models which represent phenomena occurring in various components of an apparatus for producing refrigeration effect by means of heat exchange between refrigerant and air into categories independent of

Art Unit: 2128

Abstract. Paragraph 86)

one another; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side)

(Karanikas. Abstract. Paragraphs 181, 889-890, 897-898, and 1357)

Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraph 86)

defining an abstract class by extracting characteristics common to a plurality of similar parts contained in
each category if these parts need to be distinguished for the purpose of calculation; (Judge. Page 244, Paragraph 1.
Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas.

defining the resulting categories as classes; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1.

providing, under the abstract class, as many subclasses which inherit character of the abstract class as there are necessary types of parts to be distinguished; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

implementing a phenomenological model of each defined class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

and creating a computer-implemented simulation program executable by the computer processor in an object-oriented language based on the classes. (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Regarding Claim 7:

The reference discloses A computer-implemented method for using a computer system to configure a simulation program executable by a computer processor for computing amounts of heat exchanged, comprising the steps of:

defining a compressor class, tube class, and heat exchanger class as categories among which models that represent phenomena occurring in a refrigeration system for producing refrigeration effect by means of heat

Art Unit: 2128

exchange between refrigerant and air are independent of one another; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining an abstract class by extracting characteristics common to a plurality of similar parts contained in each class if such parts exist; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

providing, under the abstract class, as many subclasses which inherit character of the abstract class as there are necessary types of parts to be distinguished; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

implementing a phenomenological model of each defined class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

and creating a computer-implemented simulation program executable by the computer processor in an object-oriented language based on the classes. (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Regarding Claim 8:

The reference discloses A computer-implemented method for using a computer system to configure a simulation program executable by a computer processor for computing amounts of heat exchanged according to claim 7, comprising the steps of:

composing the heat exchanger class by combining individual cells in a cell class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Art Unit: 2128

combining a tube class and fin class into the cell class as categories among which models that represent phenomena occurring in the cells are independent of one another; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining a refrigerant class for a working fluid which interacts with the tube class; defining an air class for a working fluid which interacts with the fin class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining an abstract class by extracting characteristics common to a plurality of similar parts contained in each of the tube class and fin class if such parts exists; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining, under each abstract class, as many subclasses which inherit character of the abstract class as there are necessary types of parts to be distinguished; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

implementing a phenomenological model of each defined class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

and creating a simulation program in an object-oriented language based on the classes. (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side)
(Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Art Unit: 2128

Regarding Claim 9:

The reference discloses A computer-implemented method for using a computer system to configure a simulation program executable by a computer processor for computing amounts of heat exchanged, comprising the steps of:

composing a heat exchanger which produces refrigeration effect by means of heat exchange between refrigerant and air, by combining individual cells in a cell class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

combining a tube class and fin class into the cell class as categories among which models that represent phenomena occurring in the cells are independent of one another; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining a refrigerant class for a working fluid which interacts with the tube class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining an air class for a working fluid which interacts with the fin class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas.

Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining an abstract class by extracting characteristics common to a plurality of similar parts contained in each of the tube class and fin class if such parts exists; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

defining, under each abstract class, as many subclasses which inherit character of the abstract class as there are necessary types of parts to be distinguished; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Art Unit: 2128

implementing a phenomenological model of each defined class; (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

and creating a computer-implemented simulation program executable by the computer processor in an object-oriented language based on the classes. (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Regarding Claim 10:

The reference discloses A storage medium containing a simulation program which makes a computer implement the functions described in any of claims 6 - 9. (Judge. Page 244, Paragraph 1. Page 245, Paragraph 1. Page 246, Model Description. Page 247, Tube and Fin and Air Side) (Karanikas. Abstract. Paragraphs 86, 181, 889-890, 897-898, and 1357)

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. All Claims are rejected.

Application/Control Number: 10/815,686 Page 14

Art Unit: 2128

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saif A. Alhija whose telephone number is (571) 272-8635. The examiner can normally be reached on M-F, 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-22792279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAA

May 2, 2007

KAMINI SHAH KAMINI SHAH EXAMINER SLOERVISORY PATENT EXAMINER